

The Nevada Division of Forestry's State Big Tree Program is searching for the largest specimen of every native and introduced tree species growing in Nevada. Nevada's program started in 1992 and the first register listed 70 trees. The current Nevada Big Tree Register has grown to 303 tree species, varieties and cultivars. Nevada's Big Tree Program shows a commonly held myth to be untrue: not only does Nevada have trees, but the state has a great diversity of large trees, both native and introduced.

Trees are defined as: "woody plants with one erect perennial stem or trunk at least 9 ½ inches in circumference (3 inches in diameter) at 4 ½ feet above the ground (breast height), a definitely formed crown of foliage, and a height of at least 13 feet." *American Forests Big Tree Register website* 

Nevada's program is patterned after the American Forests National Champion Trees program which recognizes the biggest tree of every species growing in the United States and encourages their preservation. American Forests (formerly the American Forestry Association) published its first National Register of Big Trees in 1940 and currently lists 861 trees. Criteria for inclusion on the National Register of Big Trees are the following:

"To be eligible for listing in the National Register of Big Trees, a species must be recognized as native or naturalized [grown without cultivation] in the continental United States, including Alaska but not Hawaii. Hybrids and minor varieties are excluded. To determine [species] eligibility, American Forests uses Elbert L. Little Jr.'s *Checklist of United States Trees (Native and Naturalized)*, U.S. "Department of Agriculture Handbook 541 (1979)."

Criteria for inclusion on Nevada's Big Tree Register are somewhat different for a few reasons. 95 percent of Nevadans live in an urbanized setting, and residents sometimes choose non-native trees "ornamentals" for planting. These come from all seven continents (examples are Norway Maple, Chilean Mesquite and Afghan pine). They grow well in Nevada because there are a variety of climates beneficial to these introduced trees. Of the 303 trees on the list, only 35 are native to Nevada.

Because aesthetic appeal is important to urban dwellers, they sometimes choose cultivars (cultivated variants) of tree species. There are 36 cultivars on Nevada's list, and many times they reflect a significantly different form of a species: columnar, weeping or with different foliage color. Many of these trees have grown to be large, beautiful trees.

Many of the introduced trees were planted only a few decades ago and are obviously not as big as champion trees growing in their native habitats. We refer to these introduced trees as up-and-coming trees. For comparison, the shingle oak planted in 1998 in Idlewild Park in Reno is 35 inches in circumference (one foot in diameter), 50 feet tall with maximum and perpendicular crown spreads of 25 feet and 21 feet respectively (six crown points), for a total of 93 points. The National Champion in Cincinnati, Ohio is 219 inches in circumference (four and a half feet in diameter), 102 feet tall with an average crown spread of 62 feet.



Big Tree candidates are compared on a point basis; the tree with the highest point total becomes the champion. Measuring guidelines assign one point for each inch of circumference (measured 4.5 feet above the average ground level around the tree), one point for each foot of height, and ½ point for each foot of crown spread (measured as the average of the largest spread in feet and the spread in feet measured perpendicularly). In some cases, two trees may have nearly identical scores. In Nevada's register, trees within 10 points of each other are considered co-champions.

Two examples of the size of a tree by points: the 100-point Nevada Champion European alder is 47 inches in circumference (one foot in diameter), 45 feet tall, has a maximum crown spread of 33 feet, a perpendicular crown spread of 30 feet for an average of 31 feet (divided by 4 equals 8 crown points by rounding up). The 200-point Nevada Champion deodar cedar is 128 inches in circumference (three feet in diameter), 56 feet tall and has crown spreads of 64 and 60 feet respectively (average 62 feet, divided by 4 equals 16 crown points by rounding up).



Black locust in Genoa.

<u>Nominations</u> to the Nevada register are accepted year-around and the list is updated every two years. Many <u>champion trees in Nevada are still waiting to be discovered</u>, including those on this list of. Big Trees may be found in city parks, yards and ranches around the state. Others are hidden in the mountains or in forests and can be found by hikers and outdoor enthusiasts. Some of these trees could even be National Champions, the largest tree of its kind in the United States.

- Nevada's tallest tree: Jeffrey pine, Douglas County, 159 feet
- Nevada's largest circumference tree: Great Basin bristlecone pine, Clark County, 455 inches (12 feet diameter)
- Nevada's tree with most points: Fremont cottonwood, Washoe County, 524 points

Nevada currently has two National Champions, a <u>turbinella oak</u> in Spring Mountain State Park and a <u>Great Basin bristlecone pine</u> in the USFS Spring Mountains National Recreation Area; both trees are near Las Vegas. Nevada's program recognizes trees that are not on the National Big Tree Register, but which are common in landscapes throughout Nevada. Several states also include these trees on their rosters (<u>other states' Big Tree registers</u>) and a number of Nevada trees <u>rival or exceed</u> the points of other states' champions.

# The Register has Changed



There have been numerous changes to the list since the last edition was published in 2003:

- Two Big Trees were removed because the trees died and no suitable replacement has been nominated.
- 20 Big Trees were dethroned when larger specimens were found including White ash, Umbrella Catalpa and Sugar Maple.
- Nine co-champions were added including European Alder, Desert-willow and Red Horsechestnut.
- 27 new species, varieties and cultivars were added to the updated register.

#### Nevada Big Tree Register 2015

Big Trees are Valuable

<u>i-Tree Streets</u>, a program designed by both the USDA Forest Service and private industry, uses tree inventory data to quantify the dollar value of annual environmental and aesthetic benefits: energy conservation, air quality improvement, CO<sub>2</sub> reduction, stormwater control, and beauty. This program was used by Tina McKeand, Davey Resource Group and the Nevada Shade Tree Council, to evaluate these five parameters for trees on the Nevada register. In <u>Trees Work 4 Nevada!</u>, she explains the program and shows the results and the replacement value for the largest 25 trees in Nevada.

In addition, if you have one or more trees whose dollar values you would like to determine, visit: <a href="https://www.treebenefits.com">www.treebenefits.com</a>

# **A Call to Hunt Big Trees**



Nominator and Big Tree Register Editor Rod Haulenbeek relaxing under Nevada's Champion Western white pine.

Are you interested in becoming a Big Tree Hunter? Do you have a potential big tree in your yard or near your favorite hiking trail? Many of the listed trees are in easily viewed arboreta on the University of Nevada campuses in Las Vegas and Reno, the Wilbur D. May Arboretum and Botanical Garden in Reno, the Ethel M. Chocolates Botanical Cactus Garden or the Springs Preserve Botanical Gardens in Las Vegas, or are street trees, but others are hidden in private



yards and other inaccessible areas. The public may not know about your tree, but you see it every day. If you think it is a candidate Big Tree, please contact us and we will send someone to identify and measure it. If it measures up, we will be happy to add it, and your name as nominator, to the list.

Species not represented on current Nevada Big Tree Register (incomplete list)\*

Alder (Arizona) Locust (New Mexico)

Ash (Oregon) Loquat

Bamboo Maple (Rocky Mountain)
Beech (American) Mesquite (Screw Bean)
Cactus (Saguaro) Oak (California Black)
Cercocarpus (Birchleaf) Pear (Kawakami)

Cherry (Bitter, Carolina Laurel) Peppertree
Citrus species Privet (Glossy)

Douglas-fir (Rocky Mountain) Sapindus species (Soapberry, etc.)

Elm (English) Serviceberry
Fir (Subalpine) Spruce (Serbian)

Formanns mallee Tipa

Hackberry (Desert) Willow (Golden, Goodings, Peachleaf)

Jacaranda

Linden (Silver)

<sup>\*</sup>Three of the 31 trees on the 2012 not-represented list were added to this register